

What is claimed is:

1. An apparatus for receiving parts traveling at a first speed through a receiving zone and applying the parts to a carrier traveling at a second speed through an application zone, the apparatus comprising:  
at least one rotatable transferring device for receiving the parts in the receiving zone and applying the parts in the application zone; and  
at least one independent driving mechanism for rotating the transferring device, the independent driving mechanism including a programmable motor coupled to the transferring device via a transmitting mechanism for conveying energy therebetween;  
wherein the independent driving mechanism maintains the transferring device at a first surface speed in the receiving zone as the transferring device picks up the parts and maintains the transferring device at a second surface speed in the application zone as the transferring device applies the parts to the carrier.
2. The apparatus as defined in claim 1 wherein the first and second surface speeds of the transferring device are substantially constant.
3. The apparatus as defined in claim 1 wherein the first and second surface speeds of the transferring device are variable.
4. The apparatus as defined in claim 2 wherein either the first surface speed of the transferring device or the second surface speed of the transferring device is variable.
5. The apparatus as defined in claim 1 wherein the first surface speed of the transferring device is substantially equal to the first speed of the parts in the receiving zone and the second surface speed of the transferring device is substantially equal to the second speed of the carrier in the application zone.
6. The apparatus as defined in claim 1 wherein the transferring device comprises at least one shell segment having an arcuate outer surface, the shell segment moves along an orbital path that passes through the receiving zone and the application zone during rotation of the transferring device, the shell segment collects the parts in the receiving zone and holds them against the arcuate outer surface before applying the parts to the carrier in the application zone.

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7. The apparatus as defined in claim 6 wherein the shell segment utilizes a vacuum, electrostatics, or surface coefficient of friction to hold the parts to the arcuate outer surface.
  8. The apparatus as defined in claim 6 wherein the transferring device comprises at least two shell segments.
  9. The apparatus as defined in claim 1 wherein the carrier comprises a web substrate, a belt or a drum.
  10. The apparatus as defined in claim 1 wherein the transmitting mechanism comprises a direct coupling, gear to gear connection, gearbox or transmission belting and pulleys.
  11. The apparatus as defined in claim 8 further comprising an applicator for performing a secondary process on the parts between the receiving zone and the application zone.
  12. The apparatus as defined in claim 11 wherein the secondary process involves the ~~application of an adhesive or printing.~~
  - ✓ 13. An apparatus for receiving parts traveling at a first speed through a receiving zone and applying the parts to a carrier traveling at a second speed through an application zone, the apparatus comprising:
    - at least two rotatable transferring devices for receiving the parts in the receiving zone and applying the parts in the application zone;
    - at least two independent driving mechanisms for rotating the transferring devices, the independent driving mechanisms including programmable motors coupled to the transferring devices via transmitting mechanisms for conveying energy therebetween;
    - wherein the independent driving mechanisms maintain the transferring devices at first surface speeds in the receiving zone as the transferring devices pick up the parts and maintain the transferring devices at second surface speeds in the application zone as the transferring devices apply the parts to the carrier.
  - 2/ 14. The apparatus as defined in claim 13 wherein the first and second surface speeds of the transferring devices are substantially constant.
  - 3/ 15. The apparatus as defined in claim 13 wherein the first and second surface speeds of the transferring devices are variable.

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16. The apparatus as defined in claim 14 wherein either the first surface speeds of the transferring devices or the second surface speeds of the transferring devices are variable.

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17. The apparatus as defined in claim 13 wherein the first surface speeds of the transferring devices are substantially equal to the first speed of the parts in the receiving zone and the second surface speeds of the transferring devices are substantially equal to the second speed of the carrier in the application zone.

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18. The apparatus as defined in claim 13 wherein each of the transferring devices comprises at least one shell segment having an arcuate outer surface, each shell segment moves along an orbital path that passes through the receiving zone and the application zone during rotation of the transferring devices, each shell segment collects the parts in the receiving zone and hold the parts against the arcuate outer surfaces utilizing a vacuum, electrostatics, or coefficient of friction before applying the parts to the carrier in the application zone.

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19. The apparatus as defined in claim 18 wherein each of the transferring devices comprises at least two shell segments having arcuate outer surfaces.

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20. The apparatus as defined in claim 13, further comprising an applicator for performing a secondary process on the parts between the receiving zone and the application zone.

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21. The apparatus as defined in claim 20 wherein the secondary process involves the application of an adhesive or printing.

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22. The apparatus as defined in claim 13 further comprising a cutting device wherein a continuous web of material is cut into parts at the receiving zone.

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23. The apparatus as defined in claim 22 wherein the cutting device comprises a pinch knife cutter and a knife anvil.

Sub  
part  
24. A method for receiving parts traveling at a first speed and applying the parts to a carrier traveling at a second speed the method comprising the steps of:  
providing at least one rotatable transferring device;  
providing at least one independent driving mechanism coupled to the for rotating the transferring device, the independent driving mechanism including a programmable motor coupled to the transferring device;

programming the programmable motor to rotate the transferring device through a receiving zone at a first surface speed to collect the parts and to rotate the transferring device through an application zone at a second surface speed to transfer the parts to a carrier.

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